WHAT IS CLAIMED IS:

1. A power distribution system comprising:

a first printed circuit board;

a power supply mounted on the first printed circuit board;

a processor mounted on the first printed circuit board; and

a flexible cable connector comprising a first end electrically connected to the processor and a second end electrically connected to the power supply and configured with a length so that the power supply is in a spaced relationship relative to the processor, the flexible connector extends between the power supply and the processor independent of the first printed circuit board and includes:

a plurality of insulated power wires arranged generally parallel to each other extending from the first end to the second end of the flexible cable connector; and

a ground structure including a ground shield that surrounds the plurality of insulated power wires and extends from the first end to the second end of the flexible cable connector, with the ground structure configured to provide a return path for current between the processor and the power supply.

2. The system of claim 1 wherein the ground shield comprises at least one of:

a single portion;

a first portion and a second portion removably separable from the first portion; and

a first portion and a second portion separate from the first portion.

3. The system of claim 1 wherein the ground structure comprises:

a plurality of ground wires arranged generally parallel to the plurality of insulated power wires, extending from the first end to the second end of the connector, in a side-by-side, alternating relationship with the plurality of power wires, wherein both the plurality of ground wires and power wires are surrounded by the ground shield.

4. The system of claim 1 wherein the ground structure comprises:

a plurality of ground wires arranged generally parallel to the plurality of insulated power wires, extending from the first end to the second end of the connector, and arranged in a latticework configuration so that the plurality of insulated power wires are interspersed among the plurality of ground wires, wherein both the plurality of ground wires and power wires are surrounded by the ground shield.

5. The system of claim 1 wherein the ground structure comprises the ground shield acting as the return current path between the processor and the power supply.

6. The system of claim 1 wherein the ground structure comprises a plurality of ground wires and wherein the plurality of power wires and the plurality of ground wires are arranged as a plurality of twisted wire pairs in which each twisted pair comprises one of the plurality of ground wires and one of the plurality of insulated power wires, and the twisted wire pairs are arranged generally parallel to each other from the first end of the flexible connector to the second end of the flexible connector, and wherein the plurality of twisted wire pairs are surrounded by the ground shield.

7. The system of claim 1 wherein the ground structure comprises at least one of:

a plurality of ground wires arranged generally parallel to the plurality of insulated power wires, extending from the first end to the second end of the connector, in a side-by-side, alternating relationship with the plurality of power wires, with both the plurality of ground wires and power wires being surrounded by the ground shield;

a plurality of ground wires arranged generally parallel to the plurality of insulated power wires, extending from the first end to the second end of the connector, and arranged in a latticework configuration so that the plurality of insulated power wires are interspersed among the plurality of ground wires, with both the plurality of ground wires and power wires being surrounded by the ground shield;

the ground shield acting as one of plurality of return current paths between the processor and the power supply; and

the ground structure comprises a plurality of ground wires and wherein the plurality of power wires and the plurality of ground wires are arranged as a plurality of twisted wire pairs in which each twisted pair comprises one of the plurality of ground wires and one of the plurality of insulated power wires, and the twisted wire pairs are arranged generally parallel to each other from the first end of the flexible connector to the second end of the flexible connector, wherein the plurality of twisted pairs being surrounded by the ground shield.

8. The system of claim 1 wherein the ground structure and the plurality of insulated power wires define a single flexible sheet which is configured with a first side edge, a second side edge, and a body portion extending between the first and second side edges, and wherein the single flexible sheet is in a rolled configuration with the first side edge disposed in a center of the rolled configuration and the second side edge disposed at an outer surface of the rolled configuration.

9. The system of claim 1 and further comprising:

an adhesive insulator sheet sandwiched between the ground shield and the generally parallel arrangement of the power wires, and including a first adhesive surface for securing the power wires to the adhesive insulator sheet and a second opposite adhesive surface for securing the adhesive insulator sheet to the ground shield.

10. A power distribution system comprising:

a chassis including a power supply and a bus interface;

a printed circuit board that is removably connectable to the chassis and that is configured for electrically connecting to the bus interface of the chassis and including a processor mounted on the printed circuit board; and

a flexible cable connector comprising a first end electrically connected to the processor and a second end electrically connected to the power supply of the chassis via the bus interface of the chassis, and configured with a length so that the power supply is in a spaced relationship relative to the processor, the flexible connector extending between the power supply and the processor independent of the first printed circuit board and including:

a plurality of insulated power wires arranged generally parallel to each other extending from the first end to the second end of the flexible cable connector; and

a ground structure including a ground shield that surrounds the plurality of insulated power wires and extends from the first end to the second end of the flexible cable connector, with the ground structure configured to provide a return path for current between the processor and the power supply.

11. The system of claim 10 wherein the ground structure comprises at least one of:

a plurality of ground wires arranged generally parallel to the plurality of insulated power wires, extending from the first end to the second end of the connector, in a side-by-side, alternating relationship with the plurality of power wires, both the power wires and the ground wire being surrounded by the ground shield;

a plurality of ground wires arranged generally parallel to the plurality of insulated power wires, extending from the first end to the second end of the connector, and arranged in a latticework configuration so that the plurality of insulated power wires are interspersed among the plurality of ground wires, both the plurality of ground wires and power wires being surrounded by the ground shield;

the ground shield acting as one of plurality of return current paths between the processor and the power supply; and

the ground structure comprises a plurality of ground wires and wherein the plurality of power wires and the plurality of ground wires are arranged as a plurality of twisted wire pairs in which each twisted pair comprises one of the plurality of ground wires and one of the plurality of insulated power wires, and the twisted wire pairs are arranged generally parallel to each other from the first end of the flexible connector to the second end of the flexible connector, and the plurality of twisted pairs being surrounded by the ground shield.

12. A power transmission cable comprising:

means for mounting a power supply and a processor in spaced arrangement to be located independently from each other; and

means for transmitting power from the power supply to the processor independently of the means for mounting to minimize an inductance loop between the power supply and the processor.

13. The cable of claim 12 wherein the means for mounting comprises a printed circuit board and the means for transmitting power comprises:

a flexible elongate connector having a first end electrically connected to the processor and a second end electrically connected to the power supply, and configured with a length to separate the power supply from the processor, and including:

a plurality of ground wires;

a plurality of insulated power wires arranged generally parallel to the ground wires;

wherein the ground wires and the power wires extend generally parallel to a longitudinal axis of the cable from the first end to the second end of the flexible elongate connector;

a ground shield that surrounds the plurality of power wires and the ground wires and to which the plurality of ground wires and the plurality of insulated power wires are secured.

14. The cable of claim 13 wherein the flexible elongate connector comprises at least one of three arrangements including:

the ground wires and the insulated power wires configured to be side-by-side and spaced from each other in an alternating relationship;

the ground wires configured to define a network configuration with the insulated power wires being interspersed among the ground wires;

the ground wires and the power wires configured as a plurality of twisted wire pairs with each twisted pair comprising one of the plurality of ground wires and one of the plurality of insulated power wires, with the twisted wire pairs are arranged generally parallel to each other from the first end of the elongate flexible connector to the second end of the elongate flexible connector.

15. The cable of claim 12 wherein the means for transmitting comprises:

a flexible elongate connector having a first end electrically connected to the processor and a second end electrically connected to the power supply, and configured with a length to separate the power supply from the processor, and including:

a plurality of insulated power wires arranged generally parallel to a longitudinal axis of the flexible elongate connector from the first end to the second end of the flexible elongate cable; and

a ground shield that surrounds the plurality of power wires and to which the plurality of insulated power wires are secured, and which is configured to act as a return ground path for current from the plurality of insulated power wires.

16. A method of transmitting power between a power supply and a processor, the method comprising:

positioning the power supply and the processor on a first printed circuit board to have a fixed spaced distance relative to each other; and

connecting the power supply to the processor via a flexible elongate cable that is independent of the first printed circuit board to minimize an inductance loop between the processor and the power supply; and

defining the flexible elongate cable with a plurality of insulated power wires and a ground structure, both extending generally a length of the flexible elongate cable, the ground structure acting a return current path and including a ground shield that surrounds the plurality of insulated power wires.

17. The method of claim 16 wherein defining the flexible elongate cable comprises:

securing the power wires onto a surface of the ground shield to define a single sheet with the power wires extending from the first end to the second end of the connector;

manipulating the single sheet into at least one of a rolled configuration and a folded configuration; and

coaxially disposing an insulator jacket around the manipulated single sheet.

18. The method of claim 17 wherein defining the elongate flexible connector comprises:

providing the ground structure of the flexible elongate cable with a plurality of ground wires extending generally a length of the flexible elongate cable and surrounding the plurality of ground wires with the ground shield, and

wherein securing the power wires and the ground wires comprises at least one of:

arranging the plurality of ground wires with the plurality of insulated power wires, onto the surface of the ground shield, so that the respective ground wires and insulated power wires are side-by-side to each other and spaced from each other in an alternating relationship;

arranging the plurality of ground wires with the insulated power wires, onto the surface of the ground shield, to define a latticework configuration of the ground wires with the insulated power wires being interspersed among the ground wires; and

arranging the plurality of ground wires and the insulated power wires, onto the surface of the ground shield, as a plurality of twisted wire pairs with each twisted pair comprising one of the plurality of ground wires and one of the plurality of insulated power wires, and positioning the twisted wire pairs generally parallel to each other from the first end of the flexible elongate cable to the second end of the flexible elongate cable.

19. The method of claim 16 wherein positioning the power supply and the processor comprises:

disposing the power supply on a chassis as a substitute for placement on the first printed circuit board; and

configuring the first printed circuit board as a circuit card that is removably insertable into the chassis; and

wherein connecting the power supply to the processor comprises:

electrically and mechanically connecting the circuit card and the chassis via a bus interface of the chassis;

connecting a first end of the flexible elongate cable to the processor; and

connecting a second end of the flexible elongate cable to the power supply of the chassis via the bus interface of the chassis.

20. The method of claim 16 wherein connecting the processor to the power supply comprises:

electrically connecting the processor to a first printed circuit board via a second printed circuit board; and

electrically connecting a first end of the flexible elongate cable to the processor on the second printed circuit board via a capacitive coupler.